

**AN ANNOTATED LIST OF SOME PENTATOMIDS
(HETEROPTERA) FROM NEW MEXICO.**

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In 1932 the author had the opportunity of spending about nine months in New Mexico. With headquarters located in the upper end of Little Tesuque Canyon, at what is now the Hyde State Park, collecting in that locality was naturally more intense than in any other. However, with good roads making many localities in the state available it was only a matter of time that prevented a more extensive survey. New Mexico presents a varied topography. Its high flat mesas are broken from north to south by long, high mountain chains, the southern ends of the Rockies. The northern part of the state with an average altitude of about 7000 feet slopes gradually southward to a relatively low elevation of less than 3000 feet in the Mesilla Valley about Las Cruces and El Paso, Texas.

The Sangre de Cristo Range north and east of Santa Fe offers excellent collecting, with its very varied vegetation and climatic conditions. Arid canyons dissect the high peaks (Santa Fe Baldy and others reaching more than 12,000 feet elevation); the western ridges of this range are slightly less humid than the eastern ones. The stream banks of such rivers as the Pecos, Rio Grande, Santa Fe, etc., leave little to be desired in the way of vegetation to be collected.

Between Albuquerque and Santa Fe, lying just west of the broad valley of the Rio Grande are the Jemez Mountains. These are probably the richest, faunistically, in the state. They have hardly been studied. In Don Ana County, in the southern part of the state, lie the San Andreas and Organ Mountains. The latter offer the better collecting due to the prevalence of steady flowing streams and small waterfalls.

The major part of the state is arid mesa country, but in spite of its aridity is rich both in plants and insects. Some of the better collecting spots found are at Socorro, Hot Springs, Elephant Butte and roads leading west from Las Cruces to Deming. Unfortunately, time did not permit collecting in the Gila Valley or the Black Range, both of which should prove interesting.

Again, in 1935, a chance to collect at very high elevation of the Sangre de Cristos presented itself. Here opportunity permitted a comparison between low altitudes and high altitude forms. In general, pentatomids are not found above 8500 feet. Above that height, cicadellids, membracids, fulgorids, mirids, small lygaeids and re-

duviids are common but heavy, large bodied hemiptera are scarce. To what factors this is due is uncertain. Perhaps the short breeding periods available, lack of proper food plants and relatively low temperatures and inability to fly to those heights are important.

The following annotated list does not include records of all species from New Mexico, but does contain the species collected by the author during the two periods mentioned above. A number of new records (*) are included; the number next to each species is that of Van Duzee's 1917 catalogue of N. A. Hemiptera.

SUBFAMILY PENTATOMINAE.

TRIBE HALYINI.

The genus *Brochymena* which represents this tribe has the following species in New Mexico, all collected from the trunks of yellow pine, (*Pinus ponderosa* Engelm.) or Douglas spruce (*Pseudotsuga mucronata* Raf.)

Brochymena aborea (Say) 81. Not common but found occasionally through the upper reaches of the Pecos Valley at Cowles and trails leading to Santa Fe Baldy Peak in San Miguel County about 8000 feet altitude; June-July.

B. myops Stål 84. Less common than the preceding. Specimens all taken from *P. mucronata* Raf. bark at Cowles. Altitude about 8000 feet; July.

**B. quadripustulata* (Fabr.) 85. Only one specimen taken in Little Tesuque Canyon at about 7500 feet altitude.

**B. hoppingi* Van D. 85a. The most abundant species in this genus but probably less widespread than the others. About 50 specimens were taken at one catch from large *P. ponderosa* Engelm. trunks in the Jemez Mountains, Rio Arriba County, at about 8500 feet elevation. These were in hibernation on March 20, 1932. In 1935 additional specimens were taken in July at Panchuela near Cowles.

TRIBE PENTATOMINI.

Peribalus limbolaris Stål 94. This abundant and widespread species was taken from grasses in fresh meadows through the Santa Fe and Tesuque Canyons, at Cowles, Therma and near Raton. The species extends well northward where, in Colorado, it is even more abundant. Elevations vary from 7000 feet to 8500 feet.

**Rhytidolomia viridicata* Walk. 100. Not uncommon but not found abundantly in any locality. Appears to be a late summer form

taken from *Verbena macdougalii* Heller. Santa Fe and Te-suque Canyons and Cowles. July 25 to August 28. Elevation from 7500 feet to 8500 feet.

**Chlorochroa sayi* Stål 109. A very abundant species and in some counties a pest of economic proportions. In the wild state taken from the axils of the leaves of *Yucca* (*Y. baccata* Torr.). In the southern part of the state the species has become very obnoxious in the irrigated farm lands. Taken in hibernation at Roswell, Chaves County, at about 3500 feet. March 1. Distributed commonly at lower altitudes about Hot Springs, Socorro County; Las Cruces, Dona Ana County; Alamogordo, Otero County; May to August.

C. ligata (Say) 108. This, a larger and darker species than *C. sayi*, is less abundant but has about the same range of distribution in time and area. Likely to be found more northerly.

**Carpocoris remotus* Horv. 110. A species that extends from the Southern Colorado line over the Raton Pass into Colfax County. More abundant in central Colorado. Two specimens taken near Raton; July 6; Elevation about 7000 feet.

Solubea pugna (Fabr.) 117. The author's records show only one specimen from the northeastern part of New Mexico. The species is much more abundant in central Kansas and eastern Colorado.

Euschistus servus (Say) 118. The least abundant of the species in the state. Taken in sweeping lush meadows near Therma at an elevation of about 7000 feet. Much more abundant in the plains states and eastward; August 2.

E. euschistoides (Voll.) 121. While this species is recorded from Colorado and the north it is yet to be found in New Mexico. In the east and central west it is of very common occurrence.

E. inflatus Van D. 123. Very common in the axils and flower clusters of the mullein (*Verbascum thapsus* L.). Taken at Ruidoso Creek, Lincoln County, at about 6000 feet elevation, June-July. This species is likewise abundant in northern Colorado, where author took several dozen specimens in Rist Canyon near Fort Collins.

**Aelia americana* Dall. 144. A single specimen taken at the southern border of Colorado near Raton Pass. It probably occurs sparsely in the northern part of the state.

Prionosoma podopioides Uhl. 156. Exceedingly common in the axils and flower clusters of wild sunflowers (*Helianthus* spp.) along ditches and decadent farmsteads. The gray pubescence of the bug blends well with that of the plants. I have frequently found this species and *Perillus clanda* (Say) mutually

occupying the same inflorescences. More northerly in its distribution. Records from Raton and roads leading into Colorado; July–August; elevation 6000 feet.

**Thyanta custator* (Fabr.) 158. This is the most abundant pentatomid in the state. It is commonly taken in old grain fields and meadows, feeding on the younger leaves of wild and domestic grains. Well spread over the state. Collected from Therma, Tesuque Canyon, Santa Fe Canyon, Las Cruces, Roswell and Datil. The author has no records from the northwestern part of the state, 3000 to 8500 feet elevation; May–September.

Thyanta casta Stål 161. This species is recorded from the southern part of the state where it is found occasionally. The author does not have specimens of it from New Mexico.

**Thyanta rugulosa* (Say) 163. Much more abundant in the north but found occasionally at Therma and through the Cimarron Canyon, Colfax County, in tall wild and domestic grasses. The smallest of all the pentatomids of the state; elevation 6500 to 7000 feet; June–August.

Murganita histrionica (Hahn) 172. This well-known pest occurs occasionally on wild radishes and escaped cabbage from adjacent farms. It is of course much more common in cultivated plots. In the wild state found along the Rio Grande Valley on escapes in ditches. In cultivated grounds along the Messilla irrigated area in Dona Ana County; elevation 3000 feet to 7000 feet; July–August.

**Banasa dimidiata* (Say) 182. One specimen in sweeping wild native oak (*Quercus gambelii* Nutt.) at Tesuque Canyon; August; elevation 8500 feet.

Banasa sordida (Uhl.) 186. More common than the preceding. Found under duplicate conditions; August 10–28, 1932.

SUBFAMILY ACANTHOSOMATINAE.

The only genus and species of this subfamily occurring in New Mexico is

Elasmotherus cruciatus (Say) 204. All the specimens taken as a record were procured by beating old escaped apple trees in the mid-region of Little Tesuque Canyon, Santa Fe County; elevation 7000 feet; August 1 to 26, 1932.

SUBFAMILY ASOPINAE.

**Apateticus bracteatus* (Fitch) 225. Little Tesuque Canyon near Santa Fe (Santa Fe County), elevation 8000 feet feeding on lepidopterous larvae in apple trees; July 15.

**Podisus modestus* Dallas 229. A single specimen from sweeping

at Las Cruces, Dona Ana County; elevation 3600 feet; June 16.

- **P. serievventris* Uhler. 228. Many specimens from Little Tesuque Canyon, Santa Fe County; elevation 7500–8500 feet taken in sweeping; usually feeding on lepidopterous larvae; July 15.
- **P. (Apateticus) marginiventris* Stål 223. One specimen from Little Tesuque Canyon, Santa Fe County. This very rare species, the darkest and largest of the genus was taken in flight from an old apple tree. Probably feeding on larvae, since all species of *Podisus* are predacious; 8200 feet elevation; August 25, 1932.
- Zicrona cuprea* Dallas 235. Only one specimen of this supposedly common species was taken in Santa Fe Canyon in sweeping lush grass meadows in the vicinity of the Forest Ranger's Cabin at Monument Rock; about 8000 feet elevation; June 29.
- Perillus exaptus* Say 218. Dark forms, with relatively little red marking on the scutellum taken in sweeping rich grassy marshland at Therma, Colfax County; 7800 feet altitude; July 25.
- P. bioculatus* Stål 216. Forms darker than the typical ones, and like the preceding species with less red on the scutellum and prothorax. Common on species of sunflower and wild aster. Tesuque Canyon and mesas about Santa Fe County; July 13 to August 25.
- P. clanda* (Say) 216a. The very common light form of *P. bioculatus* in which the markings are creamy white instead of red. Abundant along roadsides; predacious on potato beetle larvae which infest wild sunflowers (*Helianthus* spp.). More common in northern New Mexico, near the Colorado line. Taos, Therma, Red River and into Trinidad Colo.; 5000 to 8000 feet; August 12 to 28.
- P. confluens* (H. H.) 214. While this species is recorded from New Mexico, the author has no specimens recorded from any locality. It is probably of more southern distribution.
- Mineus strigipes* (H. S.) 221. This very beautiful small pentatomid has a more eastern range. It has been recorded from New Mexico by Uhler in 1876. This has always been considered as a doubtful record. It is well that the record can now be verified from two specimens taken while sweeping tall grasses in a lush meadow at Laguna Vista near Therma at an altitude of about 8500 feet; Aug. 28, 1932. The habits of this insect are not at all well known but it is very probable that its habitat is tall grasses in moist situations where it feeds on small fleshy insects since it is predacious like other members of its subfamily.